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ABSTRACT

The purpose of this study was to compare subjects' degree of interest with educational level to determine the better predictor of knowledge acquired from the mass media. Interest in and knowledge about two topics (impeachment and the National Football League strike) were determined from a 1974 survey of 253 adults. Knowledge was measured in terms of two components (factual and structural) and interest was studied in terms of salience to self and salience to social milieu. Social interest, especially when combined with anticipated interpersonal communication, proved to be a better predictor of knowledge overall. Further, greater interest was found to correlate with use of more than one mass medium and a resulting higher level of knowledge. Some sex differences are noted. (Author/KS)

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DIFFERENTIAL PATTERNS OF INFORMATION ACQUISITION FROM THE MASS MEDIA: THE EFFECTS OF INTEREST

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ABSTRACT

This paper presents results of a study comparing interest with education to determine the better predictor of knowledge acquired from the mass media. Interest in and knowledge about two topics (impeachment and the NFL strike) were determined from a 1974 survey of 253 adults. Knowledge was measured in terms of two components (factual and structural); interest was studied in terms of salience to self and salience to social milieu. Social interest, especially when combined with anticipated interpersonal communication, proved to be a better predictor of knowledge overall. Further, greater interest was found to correlate with use of more than one mass medium and a resulting higher level of knowledge. Some sex differences are noted.

Although the concept of an "information explosion" is now somewhat passe, few will dispute the influence of mass media on the lives of audience members -- the watching, reading, listening public. Recent research has sought to support the contention that the mass media "may not tell us what to think, but they surely tell us what to think about" (Cohen, 1963; McCombs and Shaw, 1972). The idea of an "agenda-setting function" of the mass media has shed some light on the ways in which they affect the information environment, especially pertaining to political issues and personalities. A less restricted area of investigation has used the "uses and gratifications" approach, which views an individual as "an active participant in determining the effects of mass communications upon him..." (Chisman, 1974). Thus, proponents of this approach would argue that "people bend the media to their needs more readily than the media overpower them", not just on matters of politics but on a wide range of topics (Katz, et. al., 1973). Questions regarding the roles played by different media in terms of gratifications and effects, how different persons "use" the media to meet their needs, gain from attending to one medium or more, and others, comprise the focus of uses and gratifications research and of such sub-areas as salience and need for orientation.

An individual's need for orientation to the broader social milieu is often associated with his information-seeking activity. Among the four types of information-seeking behavior identified by Atkin (1973) are information search (purposefully initiated in response to some specific question about a topic of interest) and information receptivity (an openness to question formulation during routine scanning of messages). These behavioral manifestations arise in relation to extrinsic and intrinsic motivations. In the former case, information becomes "instrumentally" useful for responding to environmental

stimuli in a context of decision-making. The latter situation is characterized by some need for satisfaction emphasizing entertainment or personal interests.

Research on information seeking tends to follow the pattern of functional analysis of communication (Wright, 1960; Sears and Freedman, 1967; Atkin, 1972; 1973). It relies heavily on the classic, though not universally accepted, approach to information as "the reduction of uncertainty" (Cherry, 1957). Thus, Atkin (1973) differentiates between primitive and complex states of cognitive uncertainty: on the one hand, an individual may, after reprocessing stored cognitions from previous experience, still perceive some inadequacy about his level of knowledge; on the other hand, knowledge "gaps" involving more than one object may arise in such a way that additional information may reduce uncertainty about one object while increasing uncertainty about another. So for Atkin, the criterion level of certainty associated with decisional utility is formed by current knowledge in combination with extrinsic uncertainty. It would vary according to the salience of some object(s) and the requirements for adaptation to the every-day environment.

The need to adapt to the environment and to master it gives rise to a type of information seeking not always linked to immediate decisional requirements. Much of this type of information seeking is likely due to an intrinsic interest in new topics, a desire to keep abreast with relevant events and to interpret internal feelings in response to enviromental stimuli (Atkin, 1973). In this way, "the level of need for orientation reflects an individual's interest in information about a topic area" (Cole, 1974).

Katz, et. al. (1974) suggest that "students of uses and gratifications could try to work backwards....from gratifications to needs....the surveillance

function may be traced to a desire for security or the satisfaction of curiosity and the exploratory drive....attempts to correlate informational elements may stem from a more basic need to develop one's cognitive mastery of the environment." While the full impact of the information environment is far from complete assessment at this point, one's place in the social milieu compels some degree of attention to the media for personal and social satisfactions. The social situation makes one aware of problems demanding attention, information about which may be sought from the media (Edelstein, 1973). The social situation provided a field of expectations whereby various media materials must be monitored to sustain membership in valued social groupings (Atkin, 1972).

Thus far we have been speaking of a need for orientation as related to information-seeking activities. But not all information is acquired through behavioral manifestations based on needs. Individuals receive information passively, vicariously, and indirectly as well as actively, systematically, and directly. Many factors serve to differentiate the quality of various levels of information inputs through formal and informal channels. Thus, "all segments of society do not share equally in the information explosion, especially in public opinion topics of basic national and personal concern" (Robinson, 1972).

Education has been a favorite variable for researchers of media uses and effects, as it tends to give people the conceptual tools they need to handle mass media content (Wade and Schramm, 1969). McCombs and Mullins (1973) found level of education to be a prime predictor of exposure to mass communications. Another study (Robinson, 1972) found that, with respect to political items appearing in print media, heavy media use increased the information level of

non-high school graduates but had little impact on college graduates. The conclusion that "more extensive attention to the media can act to level the tremendous differences in information that obtain due to education" is seen as one solution to what we know as the "knowledge gap."

The knowledge gap hypothesis, as developed by Tichenor, et. al. (1970), states that "as the infusion of mass media information into a social system increases, segments of the population with higher socio-economic status tend to acquire this information at a faster rate than lower status segments, so that the gap in knowledge between them tends to increase rather than decrease." Early operational tests of this notion have been criticized by Genova (1974), who noted that knowledge was operationalized as belief in an issue rather than as the acquisition of factual knowledge about the issue.

Still, the general expectation that, over time, knowledge of highly publicized topics will be acquired faster by audience segments of higher socio-economic status certainly deserves careful attention.

Again, it has been shown that education tends to increase media use (Key, 1961; McCombs and Mullins, 1973) and is an important determinant of information level (Robinson, 1967), and that media use increases knowledge in certain instances (Robinson, 1972). But one must examine patterns of media use, the roles of different media, and interest in relation to increased knowledge as well (see Genova, 1974).

The literature reveals a preference for print media among those with higher socio-economic levels; conversely, persons characterized by lower socio-economic status read less but watch more television (Dervin and Greenberg, 1972). However, demographic characteristics are not helpful in understanding who watches what on television (Greenberg and Kumata, 1968; Bower, 1973).

Apart from which particular medium is being used, "the manner in which a medium is used has a lot to do with information level...." (Genova, 1974). Although "mere exposure to mass media does not necessarily bring about more news awareness, print media do emerge as strong contributors to political and public affairs knowledge" (Genova, 1974).

Given all research findings on how people attend to the mass media, one is led to ask <u>why</u> people use the mass media in the first place. Atkin (1973) proposes the concept of some instrumental utility attached to mass media information seeking. Genova (1974) suggests "a closer look at audience information needs and interests and their role in information gain processes (because) people do not engage their attention indiscriminately but rather according to some choice hierarchy which has meaning to them." This notion has already been related to a surveillance need for orientation (Cole, 1974) and is being extended through research conducted by Dervin (1973, 1975).

Difficulties with the over-emphasis on educational levels in relation to media use have prompted Genova (1975) to test an interest model of the knowledge gap phenomenon, and it is upon this model that the present study is based. Other researchers have incorporated less explicit interest models in studies of audience attention to the mass media. For example, Rota (1973) related relevance and salience, defined in terms of display in the media, to cognitive, affective, and behavioral predispositions among audience members. Hanneman and Greenberg (1973) looked at news "value" (operationalized as percentage of audience awareness) in relation to relevance (importance) and salience (interest) concluding that "interest may direct the information use of the mass media." McCombs and Mullins (1973) studied social-psychological strategies of information seeking. They noted that people with low political

interest levels maintain "unorganized" information, whereas persons with a higher level of political interest have well-integrated cognitive structures. Finally, two studies dealing with repetition and recall of information have touched on the importance of interest as a variable characteristic in audience analysis. Becker and Doolittle (1975) found that, within limits, greater exposure to an information campaign aroused the interest of the electorate, thereby resulting in increased information seeking up to a point. Similarly, Fine (1975) reports that a prerequisite for rapid news diffusion is that "the news must be important." We interpret this to mean that people will recall and spread news which they judge to have some relevance and salience to them; that is, they must have some interest in it.

In the present study, interest is viewed as a function of perceived information utility. First, interest is indicated through some perceived information utility to self; that is, information is of interest if it relates to a person's personal, coping behavior. Second, interest is present in some perceived information utility to the broader milieu of a person's social, communicative behavior. Finally, interest appears in some perceived anticipated utility to self or to milieu. This, we are speaking of interest in terms of some information utility from a receiver's perspective, such that there is some functional acquisition of information (Sears and Freedman, 1967). Genova (1974, 1975) discusses the antecedent, situational, and exposure factors present when interest is related to information gain (knowledge).

To sum up, information-seeking behavior is characterized by active search modes and by a general openness to information inputs, whereas passive acquisition of information reflects an individual's information receptivity. In all cases, it would seem likely that degrees and kinds of interest a person

has underlie differential patterns of information acquisition from the mass media and from interpersonal exchanges. Finally, it is probable that personal and social interests have to do with the amount of information gain and the gratifications resulting from the acquisition of information.

The present paper is based on a study designed to test an interest-based model of information acquisition processes and the interplay of factors deemed relevant to the differential patterns of knowledge displayed by television viewers. Also, we wish to examine the ways in which audience subgroups could be better profiled in the ways they approach information coming from the media.

Methodology

Data for this study were collected as part of a two-wave panel survey conducted in Lansing, Michigan in the summer of 1974. The present analysis employs data from the first wave only.

The study focuses on two topics: the National Foolball League (NFL) players' strike, and the impeachment proceedings of then-President Richard Nixon. Both topics, chosen and treated as replicates, received substantial press coverage. One topic is part of the spectrum of political affairs, while the other is related to the spectator sport which occupies tens of millions of people during the fall and winter months. One topic focused on a process which began more than a year before, while the other was of very short (just a few weeks) duration.

The variables used are media use, interest in topic, knowledge of topic, and education. Interest is conceptualized as stated interest on the one hand and manifest interest on the other. Stated interest was operationalized by a four-level response to the questions: 'How interested are you in the National

Football League strike?' and 'How interested are you in the impeachment developments these days?'. Manifest interest was derived from the responses to a number of question items relating to instrumental utility of information on the topic. The classes of manifest interest treated as separate variables are: self-interest, social interest, social interest based on primary group, social interest based on secondary group, anticipated communication, and overall interest.

Questionnaire items were assigned either to self-interest or to social interest on the basis of results from a common factor analysis with a quartimax rotation. Factor scores for all of the extracted factors were summed to form the indices of manifest interest. Question items for self-interest were: effect of event on your life, on cost of living, and on employment of the individual or someone in the social circle. Social interest items were: discussion with friends, relatives, co-workers, and other people. The NFL replication added an item dealing with enjoyment of the game. Primary group social index items were discussions with friends and relatives; secondary group social index items were discussions with co-workers or other people. Overall interest was measured as the sum of self-interest plus social interest. Potential social interest was set in terms of expected discussion with the four interpersonal referents.

Knowledge variables were conceptualized as factual knowledge and structural knowledge, following Wade and Schramm (1969) and Robinson (1972). Six knowledge items were assigned to either the structural or the factual category on the basis of a pretest. Individual scores for knowledge are sums for correct responses; a third variable, overall knowledge, is the sum of factual and structural knowledge.

Education is a key variable because an interest-based model is compared to an educational attainment-based model on the basis of proposed best predictor. Different ways of coding education were compared so as to select the strongest predictor of the criterion variable, knowledge. As a result, education is coded into six classes: less than six years, some high school, finished high school, some college, finished college, and graduate work.

Each respondent was asked where they got most of their news, and given the choices of TV, newspapers, radio, and magazines. A plurality of the sample used more than one medium. The variable was recoded into six classes: TV alone, newspaper alone, both TV and newspaper, magazine and TV or newspaper, and/or radio alone; the residual category contained less than 2% of the cases.

Results

The data were analyzed to determine patterns of media use, patterns of interest, levels of education and knowledge, interest and education as predictors of knowledge, and, finally, patterns of interest and knowledge by media use and by sex.

Media Use

The mass media are an important source of news; less than one percent of the sample did not respond to at least one of the media as an important source (see Table 1). Television is the most frequently mentioned news medium and is used by about 2/3 of the sample (N=253). Newspapers, the next most widely used medium, were mentioned by about 1/2 the sample. On the individual level, people may use more than one medium. In this study a third of the sample use more than one medium; the television and newspaper combination accounts for

17%, and magazines plus either television or newspapers account for 12%. However, two thirds of the sample use only one medium, and that is more likely to be television alone.

Table 1. Media Use.

Medium	Number	%*
TV	161	63.6
Newspaper	125	49.4
Radio	76	30.0
Magazines	37	14.6

*multiple responses permitted

	Absolute Freq	Relative Freq (PCT)
TV	93	36.8
Newspapers	52	20.6
Radio	27	10.7
Both TV and Papers	44	17.4
Mags & TV or Papers	31	12.3
Other	4	1.6
None	2	0.8
Total	253	100.0

Patterns of Interest

Both the level and pattern of interest were different for each of the replicates (see Table 2).

Table 2. Stated Interest.

NFL Stated Interest

	N	%
None	140	55
A Little	63	25
Some	31	12
A Lot	19	8
Total	253	100%

Impeachment Stated Interest

	N	%
None	10	4
A Little	35	14
Some	52	20
A Lot	156	62
Total	253	100%

Slightly less than half of the sample stated any interest in the NFL strike, and only 8% expressed strong interest in that topic. Impeachment, on the other hand, was of interest to 96%, with well over half stating keen interest in the issue.

A correlation matrix for NFL interest is presented in Table 3, showing a relatively weak relationship between self-interest and the various social indices.

Table 3. Correlation Matrix for Interest - NFL.

	Self	Social	Primary	Secondary	Anticipated	Overall	Stated
Self	----						
Social	0.2754 (253) S=0.001	----					
Primary Group	0.2644 (253) S=0.001	0.9822 (253) S=0.001	----				
Secondary Group	0.2353 (253) S=0.001	0.8314 (253) S=0.001	0.7233 (253) S=0.001	----			
Anticipated	0.2382 (253) S=0.001	0.4522 (253) S=0.001	0.4423 (253) S=0.001	0.3360 (253) S=0.001	----		
Overall Interest	0.7416 (253) S=0.001	0.6704 (253) S=0.001	0.6529 (253) S=0.001	0.5432 (253) S=0.001	0.7071 (253) S=0.001	----	
Stated Interest	0.1864 (253) S=0.001	0.6028 (253) S=0.001	0.5692 (253) S=0.001	0.5176 (253) S=0.001	0.4403 (253) S=0.001	0.4665 (253) S=0.001	----

It should be pointed out that a linear dependence exists between overall interest and all of the other indices except anticipated communication; similarly, there is a linear dependence between social interest and interest due to primary and secondary group affiliations. The correlation between self-interest and stated interest is a very low 0.19. Stated interest in NFL seems to reflect social interests, with a strong correlation of 0.60. There is a moderately strong correlation (0.44) between stated interest and anticipated discussion; likewise, the correlation of social interest with anticipated discussion is moderate, 0.45. Quite predictably, the relationship between anticipated communication and social interest is stronger for primary groups (0.44)

than for secondary groups (0.34). The correlation of overall manifest interest with stated interest in the NFL strike is 0.47.

The levels of interest in the issues involved in impeachment are substantially different from the NFL results. As was seen in Table 2, over 80% of the sample stated at least some interest in impeachment. The correlation matrix for this topic (Table 4) indicates a higher degree of correlation of self-interest with social interests and with stated interest than was the case for NFL.

Table 4. Correlation Matrix: Interest in Impeachment.

	Self	Social	Primary	Secondary	Anticipated	Overall	Stated
Self	----						
Social	0.3526 (253) S=0.001	----					
Primary Group	0.3042 (253) S=0.001	0.9511 (253) S=0.001	----				
Secondary Group	0.3469 (253) S=0.001	0.8195 (253) S=0.001	0.6024 (253) S=0.001	----			
Anticipated	0.2398 (253) S=0.001	0.5316 (253) S=0.001	0.4987 (253) S=0.001	0.4484 (253) S=0.001	----		
Overall Interest	0.7309 (253) S=0.001	0.7499 (253) S=0.001	0.6969 (253) S=0.001	0.6449 (253) S=0.001	0.7244 (253) S=0.001	----	
Stated Interest	0.2427 (253) S=0.001	0.4933 (253) S=0.001	0.5040 (253) S=0.001	0.3396 (253) S=0.001	0.3299 (253) S=0.001	0.4044 (253) S=0.001	----

The correlation of self and social interests is 0.35. The correlation between self and stated interest is a weak 0.24, which is also the level of relationship with anticipated communication. Correlations between stated interest and social interests are different in pattern and magnitude than those for NFL. Social and stated interests are still strongly correlated at 0.49, and for interest stemming from primary groups at 0.50. However, interest attributed to secondary groups is much lower, 0.33; the same is true of the relation between stated interest and anticipated communication. There is a strong relationship between anticipated communication and social interest. The correlation between overall interest and stated interest is 0.40.

When compared to levels of manifest interest, stated interest reflects more social interest than self-interest. That is, stated interest corresponds better to anticipated and actual interpersonal communication patterns. However, the consistency of this relationship is apparently somewhat topic dependent and may be influenced by a kind of "information ambience", about which more will be said later.

Levels of Education and Knowledge

Educational levels of the sample are shown in Table 5.

Table 5. Educational Levels.

Education Level	Number	Per Cent
Less than 6 years	3	1.2
Some high school	38	15.0
Finished high school	75	29.6
Some college	71	28.1
Finished college	38	15.0
Graduate work	28	11.1
Total =	253	100%

Here it will be seen that the more highly educated have a proportionately greater representation than in the nation, reflecting the University community's impact on the survey area. Because our interest in the present study is on the relationship between variables rather than on population estimates, this over-representation would not affect the validity of the findings.

The knowledge variable has two components, factual and structural knowledge. While no attempt was made to relate level of education with type of knowledge at this point, intercorrelations between the components are shown in Tables 6 and 7 below.

Levels of knowledge about NFL and intercorrelations between structural/factual types are presented in Table 6. In general, respondents as a whole had a fairly low level of knowledge about the NFL strike, both factual or structural. The correlation between factual and structural knowledge is very strong (0.61), suggesting empirically the two indices behave more as components of a single variable (overall knowledge) than as two distinct dimensions.

The patterns and levels of knowledge about impeachment are quite different from the NFL strike (see Table 7). Both factual and structural knowledge levels are considerably higher among the respondents. The distributional attributes of each knowledge index are nearly isomorphic; however, the correlation between the two variables is 0.42, suggesting a substantial relationship between them, yet dividing them into two separate dimensions.

Interest and Education as Predictors of Public Affairs Knowledge

A major objective of this study is to compare interest-based models with education-based models. As a preliminary step, we should inspect the relationship between the two opposing predictors. The correlations for the set of interest indices and education for each of the topics is presented in Table 8.

Table 6. NFL Knowledge and Correlations.

Count of Correct Responses on 3 Factual Knowledge Items

	Absolute Freq	Relative Freq (PCT)
None	126	49.8
One	53	20.9
Two	50	19.8
Three	24	9.5
Total	253	100.0

Mean	0.889	Median	0.509	STD DEV	1.033
Kurtosis	-0.800	Skewness	0.740		

Count of Correct Responses on 3 Structural Knowledge Items

	Absolute Freq	Relative Freq (PCT)
None	92	36.4
One	77	30.4
Two	65	25.7
Three	19	7.5
Total	253	100.0

Mean	1.043	Median	0.948	STD DEV	0.961
Kurtosis	-0.940	Skewness	0.424		

NFL Overall Knowledge Index (Sum of Factual and Structural)

	Absolute Freq	Relative Freq (PCT)
0.	79	31.2
1.	41	16.2
2.	42	16.6
3.	31	12.3
4.	27	10.7
5.	19	7.5
6.	14	5.6
Total	253	100.0

Mean	2.016	Median	1.655	STD DEV	1.927
Kurtosis	-0.510	Skewness	0.689		

Correlations

	Factual	Structural
Factual	----	
Structural	0.6127 (253) S=0.001	----
Overall	0.8740 (253) S=0.001	0.8764 (253) S=0.001

Table 7. Impeachment Knowledge and Correlations.

Count of Correct Responses to 3 Factual Knowledge Items

	Absolute Freq	Relative Freq (PCT)
None	31	12.3
One	86	34.0
Two	79	31.2
Three	57	22.5
Total	253	100.0

Mean	1.640	Median	1.620	STD DEV	0.964
Kurtosis	-1.003	Skewness	-0.055		

Count of Correct Responses to 3 Structural Knowledge Items

	Absolute Freq	Relative Freq (PCT)
None	41	16.2
One	70	27.7
Two	97	38.3
Three	45	17.8
Total	253	100.0

Mean	1.577	Median	1.660	STD DEV	0.963
Kurtosis	-0.929	Skewness	-0.166		

Overall Knowledge Index

	Absolute Freq	Relative Freq (PCT)
0.	13	5.1
1.	26	10.3
2.	43	17.0
3.	43	17.0
4.	60	23.7
5.	37	14.6
6.	31	12.3
Total	253	100.0

Mean	3.387	Median	3.525	STD DEV	1.723
Kurtosis	-0.731	Skewness	-0.084		

Correlations

	Factual	Structural
Factual	----	
Structural	0.4167 (253) S=0.001	----
Overall	0.8080 (253) S=0.001	0.8285 (253) S=0.001

Of the indices of NFL interest, only social interest is correlated with education above the 0.20 level, which may be considered a weak relationship. The

Table 8. Interest and Education.

	Education	
	NFL	Impeachment
Self Interest	.05	.12
Social Interest	.21**	.22**
Primary Group	.20**	.21**
Secondary Group	-.15*	-.18*
Anticipated Comm.	.15*	.20**
Overall Interest	.14	.23**

*p < .01
**p < .001

correlation with self-interest can be considered as zero. For interest in impeachment associations with education are again weak.

Further correlations comparing knowledge variables in terms of interest and education are shown in Tables 9 and 10. The NFL strike data presented in Table 9 indicate that knowledge is not correlated with manifest self-interest. However, there is a substantial pattern of correlations with social interest and its components.

Table 9. Interest Versus Education as Predictors of Knowledge: National Football League Strike

Interest	Factual	Structural	Overall
Self	.06	.14	.12
Social	.43	.42	.48
Primary Group	.41	.39	.46
Secondary Group	.33	.38	.39
Anticipated Comm.	.22	.31	.28
Overall	.24	.33	.33
Stated	.55	.55	.63
Education	.32	.18	.27

Coefficients for anticipated communication are generally weak. Of all the interest variables, it is stated interest which shows the strongest correlations. Education, on the other hand, is moderately correlated with factual knowledge, and weakly correlated with structural and overall knowledge.

A different pattern emerges for impeachment (Table 10). First, there are significant differences across types of knowledge. Coefficients for factual

Table 10. Interest Versus Education as Predictors of Knowledge: Impeachment

Interest	Factual	Structural	Overall
Self	.13	.21	.21
Social	.20	.29	.30
Primary Group	.16	.26	.26
Secondary Group	.22	.27	.30
Anticipated Comm.	.18	.31	.30
Overall	.23	.36	.36
Stated	.22	.21	.27
Education	.26	.24	.31

knowledge are mostly weak, while those for structural knowledge are moderate. For factual knowledge, manifest interest correlations vary only slightly from the figure for stated interest (0.22). For structural knowledge, the manifest interest variables are a bit stronger than the stated interest result (0.21). On the impeachment issue, education is only weakly associated with structural knowledge and factual knowledge, and moderately associated with overall knowledge. As far as the impeachment topic is concerned, at this point the differences between interest and education are not large enough to be convincing.

Tables 11 and 12 are summaries of regressions comparing the education and interest models; Table 11 shows relationships on the NFL strike topic, Table

12 presents similar information for the impeachment issue. In both cases, education and interest are compared in terms of factual, structural, and overall knowledge.

For NFL, social interest is found to be the best predictor of overall knowledge; the multiple correlation coefficient (0.23) is almost three times greater than the value obtained for education. The difference between interest

Table 10. Regression Comparing Education and Interest Models.

NFL Strike

Factual Knowledge			
Education Model			
B = .32		R = .32	R^2 = .10
Interest Model			
Social Interest	B = .43	R = .43	R^2 = .19
Structural Knowledge			
Education Model			
B = .18		R = .18	R^2 = .03
Interest Model		R = .44	R^2 = .19
Social Interest	B = .35		
Anticipated Comm.	B = .15		
Overall Knowledge			
Education Model		R = .27	R^2 = .08
B = .27			
Interest Model		R = .48	R^2 = .23
Social Interest	B = .48		

and education is significant for structural knowledge when social interest is logically combined with anticipated communication (information about a topic

is expected to have some communicatory utility in interpersonal settings). The least difference between the two models occurs at the level of factual knowledge about the NFL strike, perhaps because this topic was less subject to information ambience; we would not expect people with little or no interest in the NFL strike to be present here, and in fact, they weren't.

As has been the case, the impeachment issue presents some contrary evidence (Table 12); levels of factual knowledge about impeachment reveal neither education nor interest as strong predictors. The predictive power of interest

Table 12. Regression Comparing Education and Interest Models.

	Impeachment	
Factual Knowledge		
Education Model	$R = .26$	$R^2 = .07$
$B = .26$		
Interest Model	$R = .20$	$R^2 = .04$
Social Interest $B = .21$		
Structural Knowledge		
Education Model	$R = .24$	$R^2 = .06$
$B = .24$		
Interest Model	$R = .34$	$R^2 = .12$
Social Interest $B = .22$		
Anticipated Comm. $B = .18$		
Overall Knowledge		
Education Model	$R = .31$	$R^2 = .10$
$B = .31$		
Interest Model	$R = .35$	$R^2 = .12$
Social Interest $B = .20$		
Anticipated Comm. $B = .19$		

is not particularly high, perhaps due to information ambience; that is, both the process and the event of impeachment were in the news constantly and over time (often as the lead story) making some general level of information about the issue available to and used by many people. Thus, while for structural knowledge the percent of variance explained by interest (social interest combined with anticipated communication) is twice that of education, in terms of overall knowledge there is not much difference between interest and education as predictors of knowledge. However, it should be noted that social interest is found to be the best predictor of overall knowledge for both topics.

Other Factors: Media Use, Sex, and Differential Levels of Interest and Knowledge

Interest and Media Use

Next we turn to the relationship between patterns of media use and differential levels of manifest interest. These relationships for the NFL strike are shown in Table 13. Respondents who use magazines plus one other daily medium (TV or newspapers) have the highest level of self-interest on this topic. The lowest levels of interest are among those who rely on either TV or on newspapers but not on both. Social interest is highest among persons using magazines and TV or newspapers, and lowest among those who use either of the electronic media alone. Again, there is an interaction between newspapers and TV users whose interest level is higher than would be expected for either medium alone.

A different pattern of interest and media use emerges for the impeachment topic (see Table 14). Here, the highest self-interest level is found among th those who use both newspapers and TV. Interest among users of magazines and one of the daily media is lower than the mean for the sample, and the same is

Table 13. Media Use and Differential Interests, NFL Strike.

		Mean	N
		0.0028	(251)
Self Interest	TV	-0.047	(93)
	Newspapers	-0.125	(52)
	Radio	0.107	(27)
	Both TV and Papers	0.078	(44)
	Mags & TV or Papers	0.137	(31)

		Mean	N
		0.0035	(251)
Social Interest	TV	-0.181	(93)
	Newspapers	0.074	(52)
	Radio	-0.204	(27)
	Both TV and Papers	0.147	(44)
	Mags & TV or papers	0.267	(31)

		Mean	N
		0.0041	(251)
Anticipated Communication	TV	-0.004	(93)
	Newspapers	-0.171	(52)
	Radio	-0.109	(27)
	Both TV and Papers	0.128	(44)
	Mags & TV or Papers	0.037	(31)

		Mean	N
		0.0138	(251)
Overall Interest	TV	-0.220	(93)
	Newspapers	-0.281	(52)
	Radio	-0.027	(27)
	Both TV and Papers	0.358	(44)
	Mags & TV or Papers	0.399	(31)

Table 14. Media Use and Differential Interest, Impeachment.

		Mean	N
		0.0103	(251)
Self Interest	TV	-0.097	(93)
	Newspapers	0.033	(52)
	Radio	0.019	(27)
	Both TV and Papers	0.159	(44)
	Mags & TV or Papers	-0.0.7	(31)

		Mean	N
		0.0039	(251)
Social Interest	TV	-0.136	(93)
	Newspapers	0.172	(52)
	Radio	-0.280	(27)
	Both TV and Papers	0.197	(44)
	Mags & TV or Papers	0.054	(31)

		Mean	N
		0.0028	(251)
Anticipated Communication	TV	-0.039	(93)
	Newspapers	-0.068	(52)
	Radio	-0.277	(27)
	Both TV and Papers	0.236	(44)
	Mags & TV or Papers	0.097	(31)

		Mean	N
		-0.0481	(251)
Overall Interest	TV	-0.385	(93)
	Newspapers	0.093	(52)
	Radio	-0.617	(27)
	Both TV and Papers	0.560	(44)
	Mags & TV or Papers	0.056	(31)

true for users of TV news alone. Still another pattern is evident in terms of social interest. While users of both TV and newspapers have the highest interest level (only slightly higher than for users of newspapers only), social interest among television news users is substantially lower. This would seem to support the plethora of "common-sense hypotheses" about TV being a "passive" medium, one which fosters more self-interest than social contact. Social interest level among those who use magazines plus one of the daily media is about the mean of the sample.

Knowledge and Media Use

Relationships between the three types of knowledge about the NFL strike and respondent patterns of media use are presented in Table 15. The highest level of factual knowledge occurs among users of both television and newspapers. Factual knowledge levels of the other 'multimedia' group (magazines plus one daily medium) is somewhat lower, and newspaper users have a still lower level but are above the mean for the sample. Users of the electronic media alone have a below-average factual knowledge.

On the NFL topic, the structural knowledge pattern is similar and the highest knowledge level is among the multimedia group; however, the positions are reversed, and users of magazines plus the daily media are highest, followed by users of both TV and newspapers.

The overall knowledge index is a composite of the structural and factual indices; magazines plus a daily medium are associated with the highest level of overall knowledge, followed by users of both daily media. Again, users of the electronic media alone have below-average overall knowledge about the NFL strike.

Impeachment knowledge patterns are similar to those of the NFL replicate when one considers attention to the various mass media (see Table 16).

Table 15. Differential Knowledge by Media Use, NFL.

		Mean	N
Factual Knowledge		0.8805	(251)
	TV	0.688	(93)
	Newspapers	1.019	(52)
	Radio	0.704	(27)
	Both TV and Papers	1.114	(44)
	Mags & TV or Papers	1.065	(31)
		Mean	**N**
Structural Knowledge		1.0438	(251)
	TV	0.946	(93)
	Newspapers	1.019	(52)
	Radio	0.852	(27)
	Both TV and Papers	1.091	(44)
	Mags & TV or Papers	1.387	(31)
		Mean	**N**
Overall Knowledge		2.0120	(251)
	TV	1.710	(93)
	Newspapers	2.135	(52)
	Radio	1.630	(27)
	Both TV and Papers	2.295	(44)
	Mags & TV or Papers	2.548	(31)

Table 16. Differential Knowledge by Media Use, Impeachment.

		Mean	N
		1.6374	(251)
Factual Knowledge	TV	1.387	(93)
	Newspapers	1.577	(52)
	Radio	1.519	(27)
	Both TV and Papers	2.091	(44)
	Mags & TV or Papers	1.961	(31)

		Mean	N
		1.5697	(251)
Structural Knowledge	TV	1.634	(93)
	Newspapers	1.481	(52)
	Radio	1.259	(27)
	Both TV and Papers	1.636	(44)
	Mags & TV or Papers	1.677	(31)

		Mean	N
		3.3745	(251)
Overall Knowledge	TV	3.183	(93)
	Newspapers	3.231	(52)
	Radio	2.852	(27)
	Both TV and Papers	4.000	(44)
	Mags & TV or Papers	3.774	(31)

Here again, the highest knowledge levels are displayed by those who use more than one medium.

Sex Differences

Finally, respondents' sex differences in relation to overall levels of interest and knowledge are shown in Table 17.

Table 17. Sex and Interest/Knowledge Means.

	NFL		Impeachment	
	Male	Female	Male	Female
Interest				
Self	.04	-.03	-.05	.04
Social	.03	-.22	-.04	.04
Anticipatory	.11	-.09	0.0	0.0
Overall	.42	-.34	-.02	.06
Knowledge				
Factual	1.32	.53	1.84	1.48
Structural	1.44	.77	1.70	1.48
Overall	2.80	1.37	3.73	3.10

Males had more interest in and knowledge about the NFL strike, confirming what common sense and male chauvinists might have suggested. The mean overall interest in this topic among females was -0.34! On the other hand, females displayed more interest about impeachment than did males (whose overall interest index was a whopping -0.02), though men rated slightly higher than women in overall knowledge about the issue.

Discussion

The present study has been placed within a context of research relating to audience analysis and mass media use, addressing the general questions:

1) What do people gain from differential patterns of attention to the media?

2) What will best predict levels of knowledge about various kinds of events?

3) What are the effects of interest on the ways men and women use the media?

Thus, we have been concerned with the social basis of mass communications consumption and with issues underlying media uses and knowledge acquisition thereof.

It has been shown that some social basis exists for an increase in knowledge and no evidence has been found to support problem-solving or decision-making as the only instrumental utilities involved in attention to mass media messages. Rather, both active and passive states seen present in information acquisition, and both modes -- information-seeking and information receptivity -- appear dependent on interest as well as education. For certain kinds of knowledge and conditions (e.g. short-term exposure), interest is found to be a better predictor of media use patterns and resultant information gain. Furthermore, social interest is determined to be the best predictor of overall information gain.

What, then, is the role of education with respect to knowledge gained through attention to the mass media? We have no simple answer to that question. For any sample of adults, education along with other developmental factors, would probably appear earlier than interest in the chain which leads to level of knowledge. Some research could be done with children to determine what information "needs" may exist prior to much formal education, and to what extent interests provide motivation to meet such needs; while education is crucial for expansion of one's cognitive map, interests (perhaps viewed as exploratory needs) are likewise important for such expansion.

While education can be viewed as a social class variable (à la Tichenor, et. al., 1970) or as a cognitive variable (Wade and Schramm, 1969), both approaches tend to overlook the importance of interest as a factor in stimulating social interaction. In comparing an interest model (Genova, 1974, 1975) with an education model, the present study found that it is the social interest variables which are significant predictors of knowledge. Social interest also relates well to the notion of anticipated communication (potential utility to the social milieu) on the interpersonal level. This is in contrast to an intra-personal concern for cognitions on the one hand, and to a class orientation on the other. The latter approach is close to a "macro-social abstraction", in which the emphasis is placed beyond the scale of personal relationships to some large social aggregate. The former approach, instead, focuses on intra-personal processes, with a general concern for individual salience and self-interest.

Somewhere in between the purely personal and the wholly abstract lies a fertile, micro-social field for investigation. Within this field, the present study has shown the role of interpersonal processes in the display of interest, finding that level of interest has much to do with the way people approach the media, thereby framing what they hope to receive and use. Thus, interest -- salience to self and to one's social milieu -- aids a person in setting his or her own agenda in the information environment.

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